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RubberWorld

The technical service magazine for the rubber industry

Volume 200, No. 1 April 1989

Tread compounds with surface treated particulate

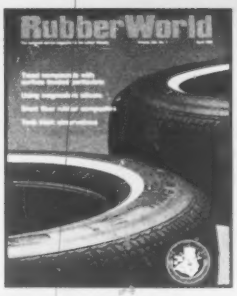
Using magnesium silicate

Short fiber rubber composites

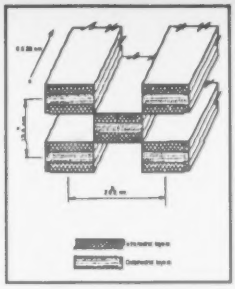
Tank track observations

Contents

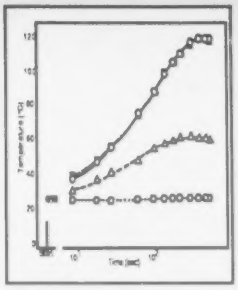
Vol. 200, No. 1/April 1989



Reinforcing materials



Magnesium silicate p. 23



Short fiber-rubber composites p. 28

6 Business Briefs
Acquisitions, expansions; contracts, licenses; corporate, financial news; markets, news.

12 Tech Service: Effective experimentation
by Jon Menough, contributing technical service editor. This month's column looks at the development of test programs that will adequately exercise the variables in a formula to determine optimum function.

14 Patent News
edited by Bob Samples, Akron Rubber Development.

16 Tread compounds containing high concentrations of surface treated particulate
by John Stark, Rubber Research Elastomerics. The author makes a strong case that present technology makes possible the reuse of tire rubber without loss of performance.

23 Using magnesium silicate as a filler
by D.S. Ogunniyi, University of Ilorin, Nigeria. The unique properties achievable with this inorganic filler, having needle-shaped particles, are described.

28 Stress decay and surface temperature distribution of short fiber-rubber composites under dynamic fatigue
by S. Mashimo, N. Nakajima, T. Noguchi, Y. Yamaguchi, Mitsuboshi Belting and M. Ashida, Kobe University. The authors show that significant differences in results of fatigue experiments occur depending on whether the applied deformation is parallel to, or perpendicular to, the main axis of the fibers.

31 Field observations on rubber tank tracks
by C.G. Pergantis, T. Murray, J.L. Mead, R.J. Shuford and A.L. Alesi, U.S. Army Materials Technology Laboratory. Infrared thermography was found to be a useful tool in relating the surface temperature of tank treads to operating variables, which are difficult to quantify in an ongoing effort to increase service life.

46 Techno Mart
New equipment, instruments, CAD/CAM, products and materials

Departments

4	Editorial	40	Meetings	54	Literature
39	Calendar	53	Jobs & People	56	Ad Index

Cover

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The Audit Bureau

Editorial

The annual Society of Automotive Engineers conference and exposition is really something to behold. Techno-glitz is how one attendee explained this combination of a high quality meeting of engineers with the automotive industry vendors and those wishing to be vendors. The technical portion of the meeting is top notch.The diversity in the over 700 technical presentations can keep you busy all week, even if your interests are limited in scope. Many vendors coordinate exhibits with their technical presentations.

But techno-glitz really applies to the exhibition alone. Cobo Hall in Detroit is turned into a carnival. This past year over 230,000 square feet of this continually-expanding building were used to exhibit the wares of approximately 620 original equipment vendors; Aisle upon aisle of lights, sounds, entertainment and whatever else deemed necessary to attract attention. And high-tech video and electronic systems are a part of many of the booths, if they can be called that anymore. Robots, laser shows and multi-media productions are used to sell engine mounts. Some companys could probably put a serious dent in the national debt with the money spent on their exhibits.

But this show was definitely not one of flash and no substance. Most of the exhibits were very informative. Exhibitors did an exemplary job of displaying their products and providing information about their capabilities. Most exhibitors had their technical people available.

The rubber industry was well represented here, and it was good to see some new exhibitors from our industry, because this is the venue where rubber and its competitors are on public display. It's no secret that plastic resin suppliers and parts manufacturers are aggressively wooing the automotive design engineer to specify plastic. And this was in evidence at the SAE show as they displayed numerous prototype parts that are presently made out of elastomers. In years past, it seemed as if the rubber industry wasn't taking this threat seriously. But the last two shows have seen a marked increase in visibility of rubber product manufacturers and materials suppliers. And the advancement of rubber technology is evident in many of the displays. Thermoplastic elastomers and highly saturated nitriles are just two material areas drawing a lot of attention from the automakers. It's good to see the industry on the offensive in maintaining existing markets and attempting to increase usage, because the plastic people will gladly move in. Those in the steel industry laughed off plastics just a few short years ago.

Don R. Smith
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RubberWorld

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Business Briefs

Acquisitions, expansions

Mark IV Industries has entered into a definitive agreement providing for the sale of **Copolymer Rubber and Chemical**, a wholly-owned subsidiary, to **Naamloze Venootschap DSM**, headquartered in The Netherlands, for cash of $242.5 million plus other considerations. Copolymer will retain its identity and will operate as a subsidiary of DSM.

Nippon Zeon, Tokyo, Japan, has reached a tentative agreement with **BP Chemicals**, London, England, for the purchase of BP's Nitrile Rubber Division, Barry, Wales. Nippon Zeon will convert the facility into a new company, Zeon Chemicals Europe, with capitalization of $8 million.

Zeon Chemicals, the American subsidiary of Nippon Zeon of Tokyo, has broken ground for a $20 million plant for production of Zetpol synthetic rubber, which will occupy a 34-acre tract in Pasadena, TX. Target date for completion is March 1990.

Canadian-based **Polysar Limited's** $25 million Tornac rubber plant, located in the Polysar Gulf Coast complex, went on stream in Orange, Texas. The plant has a 1,600 metric ton capacity.

Dexco Polymers has broken ground in Plaquemine, LA, for a styrenic block copolymer manufacturing plant with an anticipated capacity of 70 million pounds per year. It is scheduled to be on-stream in 1990.

Phoenix Medical Technology has begun production of latex patient examination gloves from a $7.5 million state-of-the-art production line in Andrews, SC. New equipment, featuring advanced process control, will result in capacity of approximately 250 million gloves per year.

Pennwalt, USA and **Akzo Chemical BV**, The Netherlands, have reached an agreement for the transfer of ownership of **Pennwalt Italia spA** to Akzo, for undisclosed terms.

Mobay's Polyurethane Division is building a multimillion dollar facility in New Martinsville, WV for the production of aromatic amine-terminated polyethers which are combined with an isocyanate to form polyurea systems. Construction began in mid-1988 and is expected to be completed in June of 1989, with an initial annual capacity of 10 million pounds. An existing production facility in New Martinsville is being upgraded to expand the company's line of MDI isocyanates.

The $2 million **L.C. Klenk Center for Design, Development & Testing** has been completed in Weatherford, TX, and will focus on application development of high performance compounds and products for the automotive, appliance, construction, electronic and medical industries. The center was developed by **JMK International**, and its subsidiaries **JAMAK Fabrication, Automotive Design Services, JAMAK Europe, K & M Plastics** and **International Component Manufacturing**.

Dutch chemical group **DSM** will build a second melamine plant in Geleen, The Netherlands at an estimated cost of Dfl. 150 mil. It is scheduled to go on stream in 1991.

Goodyear will invest $5.2 million for expansion of the Polyester Research & Development Center in Akron, OH. Set for completion by November 1989, expansion includes a 17,000 sq. ft. addition to the west end of the center, and the addition of commercial scale processing equipment.

M.A. Hanna has acquired **Bruck Plastics** of Chicago, IL, which maintains six distribution outlets in the Mid-

RMA 1988 rubber report
(figures in metric tons)

	1988	1987	% chg.
Total new rubber			
New rubber available	3,426,480	3,275,262	4.6%
Imports	1,101,617	1,093,145	.8%
Exports	570,214	491,005	16.1%
Apparent consumption	2,819,176	2,793,137	1.0%
Total natural rubber			
Imports	853,862	810,824	5.3%
Exports	54,924	36,996	48.5%
Apparent consumption	810,771	775,819	4.5%
Total synthetic rubber			
Production	2,324,863	2,184,117	6.5%
Imports	247,755	282,321	-12.2%
Exports	515,290	454,009	13.5%
Apparent consumption	2,009,637	2,017,311	-.4%
Total SBR			
Production	899,626	850,364	5.8%
Imports	91,456	83,277	9.8%
Exports	189,097	172,114	9.9%
Apparent consumption	770,860	770,811	0
Total nitrile			
Production	76,294	68,542	11.3
Imports	16,579	16,175	2.5
Exports	15,065	13,369	12.7
Apparent consumption	73,676	68,061	8.2
Polybutadiene			
Production	407,178	371,349	9.6%
Imports	75,239	81,964	-8.2%
Exports	66,993	60,816	10.2%
Apparent consumption	406,049	394,449	2.9%
Ethylene-propylene			
Production	263,089	254,060	3.6%
Imports	15,307	7,138	114.4%
Exports	47,908	47,228	1.4%
Apparent consumption	229,820	208,885	10.0%
Butyl, polychloroprene, polyisoprene, silicone and other synthetic elastomers			
Production	678,674	637,802	6.4%
Imports	49,174	93,767	-47.6%
Exports	196,227	160,482	22.3%
Apparent consumption	529,229	575,109	-8.0%

Business Briefs

single ply by the end of 1989, and 68.7 percent by the end of 1990, according to an industry spokesman.

In a measure aimed at maintaining service to members, the United Rubber Workers (URW) International Executive Board approved the streamlining of URW districts, decreasing the number from seven to five. Headquarters of the five new districts will be: District 1 - Akron, OH; District 2 - Trenton, NJ; District 3 - Oklahoma City, OK; District 6 - Toronto, Ontario, Canada; and District 8 headquarters is near Nashville, TN.

Air Products and Chemicals increased list and off-list prices of Dabco amine catalysts and metal-based catalysts, Dabco DC surfactants, Polycat 8 catalyst and LK surfactants, by three to ten percent, effective April 1.

Bridgestone reorganized its replacement tire business geographically, establishing four regions - North America, Europe, Asia and a group comprised of Central and South America, Oceania, the Middle East and Africa. In addition, the Original Equipment Tire Division will handle original equipment tire business worldwide.

General Tire increased prices of replacement tires, including tires for passenger and off-road vehicles, light and medium trucks, small and large farm and industrial vehicles, at a range from 3 to 5 percent effective April 1. The company increased radial tire lines by 3 to 5 percent and bias-constructed tires from 3 to 3.5 percent.

1988 RMA tire report
(figures in thousands of units)

Passenger tires	YTD '88	YTD '87	% change
Shipments			
original equipment	54,131	52,913	2.3
radial	46,260	44,988	2.8
replacement	155,292	151,892	2.2
radial	145,578	137,048	6.2
export	9,365	5,987	56.4
radial	8,383	5,215	60.8
total	218,788	210,792	3.8
radial	200,221	187,251	6.9
Production	174,341	167,522	4.1
radial	159,202	147,825	7.7
Truck & bus tires			
Shipments			
original equipment	8,801	7,845	12.2
radial	6,639	5,495	20.8
replacement	33,918	34,514	-1.7
radial	20,208	19,000	6.4
export	3,301	2,069	59.5
radial	2,550	1,483	72.0
total	46,020	44,428	3.6
radial	29,398	25,977	13.2
Production	37,010	35,455	4.4
radial	23,055	20,176	14.3

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